

What is claimed is:

A method of using a bipolar junction transistor as a self-oscillating down converter of a satellite down
5 converter, said satellite down converter including a circuit having at least a receiver and an output port, said method comprising providing a bipolar junction transistor between a low-noise amplifier and an intermediate frequency amplifier included in said
10 circuit, such that said bipolar junction transistor serves^{as} a local oscillator and a mixer.